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EXAMINER	
NGUYEN, KHAI MINH	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/657,261	KIM ET AL.	
	Examiner	Art Unit	
	KHAI M. NGUYEN	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 December 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claims 1-24, Applicant argues, of the remarks, that Suda in view of Ihara and Ishikawa do not disclose, teach, or suggest "(1) the private access network controller requesting the busy/idle state information of the access nodes to be updated whenever the call connection is carried out and the connection release is carried out ; (2) a data location register transmitting the busy/idle state information of the access nodes to a public network requesting for the busy/idle state information of the access nodes "

Suda in view of Ihara and Ishikawa clearly disclose (1) the private access network controller (see Suda, col.2, lines 52-58/ or see Ishikawa, item 501) requesting the busy/idle state (vacant/occupied of channel for set up a call) information of the access nodes to be updated whenever the call connection is carried out and the connection release is carried out (see Suda, col.3, lines 38-48 (At step 508, it is determined whether or not the state of the channel CHi of the PHS base station 2-1 is "vacant" by referring to the content of the memory 5. Only if it is "vacant", does the control proceed to step 509 which changes the state of the channel CHi of the PHS base station 2-1 from "vacant" to "occupied". Then, at step 510, the control unit 4 causes the PHS base station 2-1 to set up a call connection for the calling mobile

station, and also, carries out a calling processing for a destination from the calling mobile station)/ or see Ishikawa, [0006] and [0036]).

(2) a data location register (see Ishikawa, fig.5) transmitting the state information (conversation/non-during the conversation) of the access nodes to a public network requesting for the state information (conversation/non-during the conversation) of the access nodes (see Ishikawa, [0010] and [0039]).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suda (U.S.Pat-6122518) in view of Ihara et al. (U.S.Pat-6366773), and further in view of Ishikawa Kiyoshi (JP 11-068962).

Regarding claim 8, Suda teaches a wireless data system (fig.1), comprising:

a first access node (fig.1, mobile stations 6-1, PHS base stations 2-1) receiving a first network service (fig.1, fig.1, control unit 4, switching network 1, col.2, lines 52-58, col.3, lines 11-14);

a first private access network (fig.1, control unit 4, switching network 1, col.1, lines 26-36) transceiver system setting up a session when the first access node moves

within the wireless service area of the first private access network transceiver (fig.4-8d, control unit 4, switching network 1, col.2, line 52 to col.3, line 14);

a private access network controller (item 4) carrying out a call connection between the access nodes (col.3, lines 29) and to provide data service for the first and second access nodes (col.2, line 52 to col.3, line 14) when the first access node couple to the first network service makes a request for a call connection with the second access node coupled to the second network service (col.2, line 52 to col.3, line 14) and requesting state information of the first and second access nodes to be updated (fig.4-8d, col.3, lines 1-47), with the state information indicating an idle state or a busy state of the access nodes (vacant/occupied of channel for set up a call) (fig.4, col.3, lines 1-10).

Suda fails to specifically disclose a second access node receiving a second network service; and a second private access network transceiver system setting up a session when the second access node moves within the wireless service area of the second private access network transceiver.

However, Ihara teaches a second access node (nodes A-C) receiving a second network service (fig.7, abstract, co1.11, line 1 to co1.12, line 27); and a second private access network transceiver system setting up a session when the second access node moves within the wireless service area of the second private access network transceiver (fig.7, abstract, co1.11, line 1 to co1.12, line 27).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply to teaching of Ihara to Suda to provide a

technique of allowing a radio terminal that can be used both in a private branch exchange network and a public exchange network to terminate a call.

Suda and Ihara fail to specifically disclose a data location register transmitting at least one of the state information of the first access and the state information of the second access node to a public network in response to a request for the state information of the access nodes by the public network.

However, Ishikawa teaches a data location register transmitting at least one of the state information of the first access ([0039]) and the state information of the second access node ([0039]) to a public network (fig.5, item 504) in response to a request for the state information of the access nodes by the public network (fig.5, [0010] and [0039]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply to teaching of Ishikawa to Suda and Ihara to provide a method for providing both public and private mobile communication services.

Regarding claim 9, Suda, Ihara, and Ishikawa further teach the system of claim 8, further comprising a data location register updating the state information of the access nodes to busy state information according to a state information update request (see Suda, fig.4-8d, col.3, lines 1-14).

4. Claims 1-4, 10-15, and 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suda (U.S.Pat-6122518) in view of Ishikawa Kiyoshi (JP 11-068962) further in view of Lu et al. (U.S.Pat-5999813).

Regarding claim 1, Suda teaches a method for performing a call processing operation to manage state information of access nodes in a wireless data system (fig.1, PHS base stations 2-1, 2-2, mobile stations 6-1,6-2, 6-3, 6-4, switching network 1), comprising the steps of:

when an access node (fig.1, mobile stations 6-1, PHS base stations 2-1) coupled to a wireless private network makes a request for a call connection with another access node (col.3, lines 11-29) coupled to the wireless private network (fig.1, control unit 4, switching network 1, col.2, lines 52-58, col.3, lines 11-14), carrying out a call connection between the access nodes (fig.1, control unit 4, switching network 1, col.2, lines 52-58, col.3, lines 11-14); and providing a high-speed (not show) wireless data service for the access nodes (col.1, lines 26-34), and carrying out a call connection release after completing the high-speed wireless data service (not show); and

updating state information of the access nodes according to the call connection (fig.4-8d, col.3, lines 1-47) and connection release between the access nodes (not show), the state information indicating an idle state or a busy state of the access nodes (vacant/occupied of channel for set up a call) (fig.4, col.3, lines 1-10).

Suda fails to specifically disclose transmitting the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network.

However, Ishikawa teaches transmitting the state information (conversation/non-during the conversation) of the access nodes to a public network (fig.5, item 504 (semi-

public)) in response to a request for the state information (conversation/non-during the conversation)of the access nodes by the public network ([0010] and [0039]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply to teaching of Ishikawa to Suda and Ihara to provide a method for providing both public and private mobile communication services.

Suda and Ishikawa fail to specifically disclose carrying out a call connection release after completing the high-speed wireless data service, and connection release between the access nodes.

However, Lu teaches carrying out a call connection release after completing the high-speed (hybrid network) wireless data service (fig.18, col.33, lines 3-36), and connection release between the access nodes (fig.18, col.33, lines 3-36).

Therefore, it would have been obvious to one having ordinary in the art at the time invention was made to apply the teaching of Lu to Suda and Ishikawa to exchange network resources between private network and public network (improve communication quality and network bandwidth, while simplifying implementation, maintenance, and upgrade).

Regarding claim 2, Suda teaches a method for performing a call processing operation to manage state information of access nodes in a wireless data system (fig.1, PHS base stations 2-1, 2-2, mobile stations 6-1,6-2, 6-3, 6-4, switching network 1), comprising the steps of:

when an access node (fig.1, mobile stations 6-1, PHS base stations 2-1) coupled to a wireless private network makes a request for a call connection with another access

node (col.3, lines 11-29) coupled to the wireless private network (fig.1, control unit 4, switching network 1, col.2, lines 52-58, col.3, lines 11-14), carrying out a call connection between the access nodes (col.3, lines 11-29) and providing a high-speed (not show) wireless data service for the access nodes (abstract, col.1, lines 26-34);

updating state information of the access nodes to busy state information (vacant/occupied of channel for set up a call) (fig.4-8d, col.3, lines 1-47); and

when the high-speed (not show) wireless data service for the access nodes is completed (col.1, lines 26-34), carrying out a call connection release (not show);

updating the state information of the access nodes to idle state information according to the call connection release (not show) (fig.4-8d, col.3, lines 1-47).

Suda fails to specifically disclose transmitting the state information of the access nodes to the public network in response to a public network requesting the state information of the access nodes.

However, Ishikawa teaches transmitting the state information (conversation/non-during the conversation) of the access nodes to the public network (fig.5, item 504 (semi-public)) in response to a public network requesting the state information of the access nodes ([000] and [0039]).

Therefore, it would have been obvious to one having ordinary in the art at the time invention was made to apply to teaching of Ishikawa to Suda to provide a method

for implementing a private wireless communication system while still maintaining the availability of technology.

Suda and Ishikawa fail to specifically disclose high-speed wireless, and carrying out a call connection release and the call connection release.

However, Lu teaches high-speed wireless (hybrid network), and carrying out a call connection release (fig.18, col.33, lines 3-36) and the call connection release (fig.18, col.33, lines 3-36).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply to teaching of Lu to Suda and Ishikawa to exchange network resources between private network and public network (improve communication quality and network bandwidth, while simplifying implementation, maintenance, and upgrade).

Regarding claim 3, Suda teaches a method for performing a call processing operation to manage state information of access nodes in a wireless data system (fig.1, PHS base stations 2-1, 2-2, mobile stations 6-1,6-2, 6-3, 6-4, switching network 1), comprising the steps of:

when an access node (fig.1, mobile stations 6-1, PHS base stations 2-1) coupled to a wireless private network makes a request for a call connection with another access node (col.3, lines 11-29) coupled to the wireless private network (fig.1, control unit 4, switching network 1, col.2, lines 52-58, col.3, lines 11-14), allowing a private access network controller to carry out a call connection between the access nodes (col.3, lines

11-29) and to provide a high-speed (not show) wireless data service for the access nodes (abstract, col.1, lines 26-34);

allowing the private access network controller to request that state information of the access nodes be updated (vacant/occupied of channel for set up a call) (fig.4-8d, col.3, lines 1-47);

allowing a data location register to update the state information of the access nodes to busy state information (vacant/occupied of channel for set up a call) according to a state information update request (fig.4-8d, col.3, lines 1-47);

when the high-speed (not show) wireless data service for the access nodes is completed (col.1, lines 26-34), carrying out a call connection release between the access nodes (not show) and allowing the private access network controller to request that the state information of the access nodes be updated (vacant/occupied of channel for set up a call) (fig.4-8d, col.3, lines 1-47); and

allowing the data location register to update the state information of the access nodes to idle state information (vacant/occupied of channel for set up a call) according to another state information update request (fig.4-8d, col.3, lines 1-47).

Suda fails to specifically disclose allowing the data location register to transmitting the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network.

However, Ishikawa teaches allowing the data location register (fig.5) to transmitting the state information (conversation/non-during the conversation) of the access nodes to a public network in response to a request for the state information of the access nodes by the public network ([0010] and [0039]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply to teaching of Ishikawa to Suda to provide a method for implementing a private wireless communication system while still maintaining the availability of technology.

Suda and Ishikawa fail to specifically disclose high-speed wireless, and carrying out a call connection release between the access nodes.

However, Lu teaches high-speed wireless (hybrid network), and carrying out a call connection release between the access nodes (fig.18, col.33, lines 3-36).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply to teaching of Lu to Suda and Ishikawa to exchange network resources between private network and public network (improve communication quality and network bandwidth, while simplifying implementation, maintenance, and upgrade).

Regarding claim 4, Suda, Ishikawa, and Lu further teach the method of claim 3, with the data location register storing (see Suda, fig.1, memory 5) the information associated with the access node requesting for the call connection being equal to the information associated with the other access node (see Suda, fig.3-4, col.3, lines 1-10).

Regarding claim 10, Suda and Ishikawa further teach the system of claim 9, with the private access network controller requesting that the state information of the access nodes be updated (see Suda, fig.4-8d, col.3, lines 1-47),

However, Suda fails to specifically disclose high-speed wireless, and carrying out a call connection release between the access nodes when the data service for the access nodes is completed.

Lu teaches high-speed wireless (hybrid network), and carrying out a call connection release between the access nodes when the data service for the access nodes is completed (fig.18, col.33, lines 3-36).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply to teaching of Lu to Suda and Ishikawa to exchange network resources between private network and public network (improve communication quality and network bandwidth, while simplifying implementation, maintenance, and upgrade).

Regarding claim 11, Suda, Ishikawa, and Lu further teach the system of claim 10, with the data location register updating the state information of the access nodes to idle state information according to another state information update request (see Suda, fig.3-4, col.3, lines 1-47).

Regarding claim 12, Suda, Ishikawa, and Lu further teach the system of claim 11, with the first network service being a wireless private network (see Suda, fig.1, col.2, lines 26-33, see Lu, fig.3b).

Regarding claim 13, Suda, Ishikawa, and Lu further teach the system of claim 12, with the second network service being a public land mobile network (see Suda, col.2, lines 52-58, see Lu, fig.3b).

Regarding claim 14, Suda, Ishikawa, and Lu further teach the system of claim 12, with the second network service being a public network (see Suda, col.2, lines 52-58).

Regarding claim 15, Suda, Ishikawa, and Lu further teach the system of claim 13, with the data location register storing the information associated with the first access node of the wireless private network equal to the information associated with the second access node of the public land mobile network (see Suda, col.3, lines 1-10).

Regarding claim 18, Suda teaches computer-readable medium having computer-executable instructions for performing a method for performing a call processing operation to manage state information of access nodes in high-speed wireless (not show) data system (fig.1, PHS base stations 2-1, 2-2, mobile stations 6-1,6-2, 6-3, 6-4, switching network 1), comprising:

when an access node (fig.1, mobile stations 6-1, PHS base stations 2-1) coupled to a wireless private network makes a request for a call connection with another access node (col.3, lines 11-29) coupled to the wireless private network (fig.1, control unit 4, switching network 1, col.2, lines 52-58, col.3, lines 11-14), carrying out a call connection between the access nodes (fig.1, control unit 4, switching network 1, col.2, lines 52-58, col.3, lines 11-14), providing a high-speed wireless (not show) data service for the

access nodes (col.1, lines 26-34), and carrying out a call connection release after completing the wireless data service (not show); and

updating state information of the access nodes according to the call connection (fig.4-8d, col.3, lines 1-47) and connection release between the access nodes (not show), the state information indicating an idle state or a busy state of the access nodes (vacant/occupied of channel for set up a call) _(fig.4, col.3, lines 1-10).

Suda fails to specifically disclose transmitting the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network.

However, Ishikawa teaches transmitting the state information (conversation/non-during the conversation) of the access nodes to a public network (fig.5, item 504 (semi-public)) in response to a request for the state information of the access nodes by the public network ([0010] and [0039]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply to teaching of Ishikawa to Suda to provide a method for implementing a private wireless communication system while still maintaining the availability of technology.

Suda and Ishikawa fail to specifically disclose high-speed wireless, and carrying out a call connection release after completing the wireless data service, and connection release between the access nodes.

However, Lu teaches high-speed wireless (hybrid network), and carrying out a call connection release after completing the wireless data service (fig.18, col.33, lines 3-36), and connection release between the access nodes (fig.18, col.33, lines 3-36).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply the teaching of Lu to Suda and Ishikawa to exchange network resources between private network and public network (improve communication quality and network bandwidth, while simplifying implementation, maintenance, and upgrade).

Regarding claim 19, Suda teaches a computer-readable medium having computer-executable instructions for performing a method for performing a call processing operation to manage state information of access nodes in a high-speed wireless (not show) data system (fig.1, PHS base stations 2-1, 2-2, mobile stations 6-1,6-2, 6-3, 6-4, switching network 1, control unit 4, memory 5), comprising:

when an access node (fig.1, mobile stations 6-1, PHS base stations 2-1) coupled to a wireless private network makes a request for a call connection with another access node (col.3, lines 11-29) coupled to the wireless private network (fig.1, control unit 4, switching network 1, col.2, lines 52-58, col.3, lines 11-14), carrying out a call connection between the access nodes to provide a high-speed wireless (not show) data service for the access nodes (col.1, lines 26-34);

updating state information of the access nodes to busy state information (vacant/occupied of channel for set up a call) (fig.4-8d, col.3, lines 1-47);

when the high-speed wireless (not show) data service for the access nodes is completed (col.1, lines 26-34), carrying out a call connection release (not show); and

updating the state information of the access nodes to idle state information according to the call connection release (not show) (fig.4-8d, col.3, lines 1-47).

Suda fails to specifically disclose transmitting the state information of the access nodes to the public network in response to a public network requesting the state information of the access nodes.

However, Ishikawa teaches transmitting the state information (conversation/non-during the conversation) of the access nodes to the public network (item 504 (semi-public) in response to a public network requesting the state information of the access nodes ([0010] and [0039]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply to teaching of Ishikawa to Suda to provide a method for implementing a private wireless communication system while still maintaining the availability of technology.

Suda and Ishikawa fail to specifically disclose high-speed wireless, and carrying out a call connection release and the call connection release.

However, Lu teaches high-speed wireless (hybrid network), and carrying out a call connection release (fig.18, col.33, lines 3-36) and the call connection release (fig.18, col.33, lines 3-36).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply the teaching of Lu to Suda and Ishikawa to exchange network resources between private network and public network (improve communication quality and network bandwidth, while simplifying implementation, maintenance, and upgrade).

Regarding claim 20, Suda teaches a computer-readable medium having stored thereon a data structure for performing a call processing operation to manage state information of access nodes in a high-speed wireless (not show) data system (fig.1, PHS base stations 2-1, 2-2, mobile stations 6-1,6-2, 6-3, 6-4, switching network 1, control unit 4, memory 5), comprising:

a first field containing data representing when an access node (fig.1, mobile stations 6-1, PHS base stations 2-1) coupled to a wireless private network makes a request for a call connection with another access node (col.3, lines 11-29) coupled to the wireless private network(fig.1, control unit 4, switching network 1, col.2, lines 52-58, col.3, lines 11-14), allowing a private access network controller to carry out a call connection between the access nodes (fig.4-8d, col.3, lines 1-47) and to provide a high-speed wireless (not show) data service for the access nodes (col.1, lines 26-34);

allowing the private access network controller to request that state information of the access nodes be updated (vacant/occupied of channel for set up a call) (fig.4-8d, col.3, lines 1-47); and

allowing a data location register to update the state information of the access nodes to busy state information according to a state information update request (vacant/occupied of channel for set up a call) from the private access network controller (item 4) (fig.4-8d, col.3, lines 1-47);

a second field containing data representing when the high-speed wireless (not show) data service for the access nodes is completed (col.1, lines 26-34), carrying out a call connection release between the access nodes (not show) and allowing the private access network controller to request that the state information of the access nodes be updated (col.1, lines 26-34); and

allowing the data location register to update the state information (of the access nodes to idle state information according to the state information update (vacant/occupied of channel for set up a call) request from the private access network controller (item 4) (fig.4-8d, col.3, lines 1-47).

Suda fails to specifically disclose a third field containing data representing allowing the data location register to transmit the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network.

However, Ishikawa teaches a third field containing data representing allowing the data location register (fig.5) to transmit the state information of the access nodes (conversation/non-during the conversation) to a public network (item 504 (semi-public)

in response to a request for the state information of the access nodes by the public network ([0010] and [0039]).

Therefore, it would have been obvious to one having ordinary in the art at the time invention was made to apply to teaching of Ishikawa to Suda to provide a method for implementing a private wireless communication system while still maintaining the availability of technology.

Suda and Ishikawa fail to specifically disclose high-speed wireless, and carrying out a call connection release between the access nodes.

However, Lu (831) teaches high-speed wireless (hybrid network), and carrying out a call connection release between the access nodes (fig.18, col.33, lines 3-36).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply the teaching of Lu to Suda and Ishikawa to exchange network resources between private network and public network (improve communication quality and network bandwidth, while simplifying implementation, maintenance, and upgrade).

Regarding claim 21, Suda, Ishikawa, and Lu further teach the method of claim 1, with a updating state information of the access nodes (see Suda, fig.4-8d, col.5, lines 13-23) accommodating a public network to recognize state information of a private network subscriber located in a private (see Suda, fig.4-8d, col.3, lines 1-47, col.5, lines 13-23) and public cell area (see Suda, col.2, lines 52-58) by transmitting terminal state information from the private network to the public network in a mobile communication

system interworked with the public and private networks (see Ishikawa, col.10, line 56 to col.11, line 3).

Regarding claim 22 is rejected with the same reasons set forth in claim 21.

Regarding claim 23, Suda, Ishikawa, and Lu further teach the computer-readable medium having computer-executable instructions for performing a method for performing a call processing operation to manage state information of access nodes in a high-speed wireless data system of claim 18, with said updating state information of the access nodes (see Suda, fig.1, fig.4-8d, col.5, lines 13-23) accommodating a public network to recognize state information of a private network subscriber located in a private (see Suda, fig.4-8d, col.3, lines 1-47, col.5, lines 13-23) and public cell area (see Suda, col.2, lines 52-58) by transmitting terminal state information (conversation/non-during the conversation) from the private network to the public network in a mobile communication system inteworked with the public and private networks (see Ishikawa, [0010] and [0039]).

Regarding claim 24 is rejected with the same reasons set forth in claim 23.

5. Claims 5-7 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suda (U.S.Pat-6122518), in view of Ishikawa Kiyoshi (JP 11-068962), in view of Lu et al. (U.S.Pat-5999813), and further in view of Nelakanti et al. (U.S.Pub-20060019664).

Regarding claim 5, Suda, Ishikawa, and Lu further teach the method of claim 4, with the private access network controller (see Ishikawa, fig.7) and

However, Suda, Ishikawa, and Lu fail to specifically disclose the data location register being configured to being based on an Internet protocol.

Nelakanti teaches the data location register being configured to being based on an Internet protocol ([0047], [0049]-[0050]).

Therefore, it would have been obvious to one having ordinary in the art at the time invention was made to apply to teaching of Nelakanti to Suda, Ishikawa, and Lu to permits users to operate freely in both public and private wireless networks using standard mobile stations while achieving high private network data rates.

Regarding claim 6, Suda, Ishikawa, Lu, and Nelakanti further teach the method of claim 5, with the private access network controller sending a state information update request message including current state information of the originating access node (see Suda, fig.4, col.3, lines 1-47) and the terminating access node to the data location register (see Suda, fig.4, col.3, lines 1-47).

Regarding claim 7, Suda, Ishikawa, Lu, and Nelakanti further teach the method of claim 5, with the private access network controller sending a request message indicating the state information of the originating access node (see Suda, fig.4-8d, col.2, line 52 to col.3, lines 47) and the terminating access node to be updated to busy state information (see Suda, fig.3-4, col.3, lines 1-47) and the data location register searching for the subscriber information upon receiving the state information update request (see Suda, fig.4-8d, col.2, line 52 to col.3, lines 47) and updating the access node state information to busy state information (see Suda, fig.4, col.3, lines 1-47).

Regarding claim 16 is rejected with the same reasons set forth in claim 5.

Regarding claim 17 is rejected with the same reasons set forth in claim 7.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI M. NGUYEN whose telephone number is (571)272-7923. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571.272.7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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